

11  
Claims

1. A document generation system for producing a document from information derived from an information repository, comprising:

5 a source of code representing a document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items;

a source of document generation control information supporting insertion of said desired data items derived from said information repository in said data fields; and

10 a document processor for applying said control information in replacing template document data field placeholder items with desired data items, to produce a generated document.

2. The system according to claim 1, wherein

15 said control information contains at least one of, (a) an identification of data fields in said template document available to be replaced by desired data items, (b) an identification of a location in said information repository of a desired data item associated with an individual data field, and (c) an identification of a location in said information repository of a first data item for insertion in said individual data field of said group of data fields and data items 20 sequentially linked to said first data item are inserted in remaining data fields of said group of data fields.

3. The system according to claim 2, wherein

25 said location identifier of said first data item comprises an Extensible Markup Language compatible XPath value.

4. The system according to claim 1, wherein

said data source file comprises at least one of, (a) a comma delimited file and (b) a flat file.

30

5. The system according to claim 1, wherein

said repetition identifier comprises a Rich Text Format (RTF) compatible Bookmark.

6. The system according to claim 1, wherein  
said code representing a document template is Rich Text Format (RTF) compatible.

5        7. The system according to claim 1, wherein  
          said document processor processes template document data, excluding said desired  
data items inserted in said placeholder items, by incorporating said template document data in  
said generated document and said generated document is compatible with Extensible  
Stylesheet Language (XSL).

10        8. The system according to claim 1, wherein said generated document comprises one  
or more of, (a) an SGML document, (b) an XML document, (c) an HTML document, and (d)  
a multimedia file.

15        9. The system according to claim 1, wherein  
          said desired data items derived from said information repository are Extensible  
Markup Language (XML) compatible data items derived from an XML compatible  
document.

20        10. The system according to claim 1, wherein  
          said document processor processes template document data in Rich Text Format  
(RTF) together with desired data items derived from said information repository in Extensible  
Markup Language (XML) to provide said generated document in an Extensible Stylesheet  
Language (XSL) format.

25        11. The system according to claim 10, wherein  
          said document processor includes an XML parser to process said generated document  
in Extensible Stylesheet Language (XSL) format to provide a processed document in Rich  
Text Format (RTF).

30

12. The system according to claim 1, wherein

said document processor examines said document template to identify an individual data field containing a placeholder item and incorporate a link in said individual data field identifying a corresponding item in said document generation control information, said corresponding item enabling locating one of said desired data items in said information repository for insertion in said individual data field.

13. A graphical User interface system supporting generation of a document, comprising:

10 an image generator for generating at least one image window including:

an image element enabling User selection of a document template, said document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items; and

15 an image element for initiating examination of said document template to identify an individual data field and insert a desired data item derived from an information repository in said data field, to produce a generated document.

20 14. A method for producing a document from information derived from an information repository, comprising the steps of:

examining code representing a document template, said document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items; and

25 applying control information supporting insertion of said desired data items derived from said information repository in said data fields to replace template document data field placeholder items with desired data items, to produce a generated document.

15. A method for producing a document comprising the steps of:  
receiving an electronic document template including:  
data fields having placeholder items, and  
at least one repetition identifier indicating at least one of said data fields that is  
5 to be replicated;  
receiving data items; and  
merging said electronic document template with said data items to produce the  
document responsive to replacing placeholder items with said data items, and responsive to  
replicating the at least one of said data fields that is to be replicated to provide a group of data  
10 fields to be replaced by a plurality of said desired data items.

16. A method for producing a document according to claim 15, wherein said step of  
merging is performed by at least one of, (a) XSL compatible code and (b) a mail merge  
application program.

15

17. A method for producing a document according to claim 15, further comprising the  
steps of:  
receiving a selection of the electronic document template; and  
receiving a selection of a source of the data items.

20